Application No.: 09/755,204 Docket No.: 59097(30471)

LISTING OF THE CLAIMS

65-81 (canceled)

82. (amended) A method of improving pregnancy rates in a non-human mammal female bovine, comprising:

culturing adult bovine fibroblast donor cells in serum starved media;

passaging the cells between about 10 and about 15 passages;

nuclear transferring the donor cells into enucleated recipient <u>bovine</u> <u>oocytes to form a</u> <u>cybrid</u>; <u>oocyte cells to promote cell fusion and embryo formation</u>;

culturing nuclear transferred embryos in serum supplemented media the cybrid to form blastocytes; and

transferring the blastocytes cybrid into a recipient non-human mammal female bovine wherein pregnancy rates are up to at least about 64% based on the number of embryo recipients.

- 83. (Amended) The method of claim 82 wherein the fibroblast cells are obtained from an aged non-human mammalian male bovine donor.
- 84. (canceled) The method of claim 83 wherein the aged donor is a bovine.
- 85. (previously presented) The method of claim 83 wherein the aged donor is male.
- 86. (previously presented) The method of claim 84 wherein the aged donor is 17 years old.

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87. (previously presented) The method of claim 82 wherein the serum starved media contains up to 0.5% serum.

- 88. (previously presented) The method of claim 82 wherein the passaging is 10 passages.
- 89. (previously presented) The method of claim 82 wherein the passaging is 15 passages.
- 90. (previously presented) The method of claim 82 wherein the serum supplemented media is about 10% serum.
- 91. (previously presented) A method of preparing a long term fibroblast cell population, comprising:

passaging donor fibroblast cells from an adult non-human mammal for about 10 to about 15 passages in serum starved media containing up to 0.5% serum; and

selecting a population of cells identified as about 10-15 µm in diameter and smooth membrane surfaced wherein said cells comprise a long term fibroblast cell population exhibiting delayed senescence.

- 92. (previously presented) The method of claim 91 wherein the donor cell is obtained from a male mammal.
- 93. (previously presented) The method of claim 91 wherein the passaging is 10 passages.
- 94. (previously presented) The method of claim 91 wherein the passaging is 15 passages.
- 95. (withdrawn from consideration) A method of preparing somatic cells having improved genetic totipotency, comprising:
 successively culturing non-embryonic somatic cells in serum deprived media containing up to 0.5% serum for at least 5 passages prior to genetic manipulation of the cells.